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AUTHOR Gaffney, Janet S.
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ABSTRACT

Noting that Reading Recovery is a short-term, supplementary reading and writing intervention for the lowest achieving first-grade children, this report describes Reading Recovery as a way of increasing the possibility of literacy success for all children. Distinctions that contribute to the success of Reading Recovery are highlighted in the report. The relationship between Reading Recovery and special education is discussed within the context of the Regular Education/Special Education Initiative. The implications for the reorganization of schools and for teacher education programs are presented in the report as a shared responsibility of educators and of teachers to be accountable for the effectiveness of interventions with children. (Contains 44 references.) (Author/RS)

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READING RECOVERY®: WIDENING THE SCOPE OF PREVENTION FOR THE LOWEST ACHIEVING READERS

Janet S. Gaffney
University of Illinois at Urbana-Champaign

August 1993

Center for the Study of Reading

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College of Education
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
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College of Education
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174 Children's Research Center
51 Gerty Drive
Champaign, Illinois 61820

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Abstract

Reading Recovery is a short-term, supplementary reading and writing intervention for the lowest achieving first-grade children. In this report, Reading Recovery is described as a way of increasing the possibility of literacy success for all children. Distinctions that contribute to the success of Reading Recovery are highlighted. The relationship between Reading Recovery and special education is discussed within the context of the Regular Education/Special Education Initiative. The implications for the reorganization of schools and for teacher education programs are presented as a shared responsibility of educators and of teachers to be accountable for the effectiveness of interventions with children.

Reading Recovery:[1] Widening the Scope of Prevention for Children at Risk of Reading Failure

The first time I observed Juan, his desk was placed alone in a corner of the first-grade classroom. The teacher stated that he was unable to concentrate on any tasks and that he completed no work. He had been referred for possible placement in special education by his teacher, who strongly suspected that he was a child with an attention-deficit disorder. The school faculty had requested that he be placed on Ritalin. He was on a waiting list for a comprehensive evaluation.

The first-grade teacher was concerned about Tina's reading after the first few days of school. She was considering putting Tina back into a transition room so that she would have time to develop some readiness skills for reading.

Amanda was absent 18 days in the first two months of first grade in her new school. The information in the cumulative file revealed that she attended kindergarten at a previous school only 30 days, had transferred to a school in a metropolitan area, and then returned to the school from which she left. A two-month gap is unaccounted for by the records.

For different reasons, these three young children were at high risk for reading failure early in school. After participating in Reading Recovery for less than three months, however, each of these first graders was reading and writing at the average levels of their peers. As the result of a referral made prior to Juan's participation in Reading Recovery, he received a comprehensive evaluation for possible placement in special education and was found to be "not eligible." His classroom teacher observed him reading little books for 20 minutes during an indoor recess while Nerf balls passed over his head and noise filled the room. Tina was moved to an average reading group after 27 lessons. A few weeks after Reading Recovery teaching had been discontinued, Tina was moved to the highest reading group. After starting Reading Recovery in February, Amanda was absent only two days for the remainder of the school year. Her participation in Reading Recovery had ended in April.

In this report, Reading Recovery is described as a way of increasing the possibility of literacy success for all children by providing specialized instruction for the lowest children within the general education system. Distinctions that contribute to the success of Reading Recovery are highlighted. The relationship between Reading Recovery and special education is discussed within the context of the Regular Education/Special Education Initiative (Will, 1986). The implications for the reorganization of schools and for teacher-education programs are presented as a shared responsibility of educators of children and of teachers to be accountable for the effectiveness of interventions with children.

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[1]The name Reading Recovery is a registered trademark® of The Ohio State University. The Reading Recovery Program, as established in the United States, is an officially licensed program authorized to utilize Professor Marie M. Clay's materials and those of The Ohio State University. All Reading Recovery Programs that have met the requirements established by Marie M. Clay and other designates of The Ohio State University have been granted a royalty-free license to use in conjunction with their program. The University of Illinois at Urbana-Champaign is an officially licensed program.

Description of Reading Recovery[2]

Reading Recovery, an intervention system designed to reduce the incidence of reading failure in a community, was developed in New Zealand by Marie Clay (1985), who worked closely with competent teachers of young children to develop an array of procedures that could be used effectively to support the acquisition of reading and writing by children who are making inadequate progress after one year of school. Reading Recovery was developed over two years, followed by one year of field-trial research (1976-78). The program expanded in the education system until 1983, when it was adopted as a national program in New Zealand (Clay, 1990b). Reading Recovery is currently being implemented in five countries (i.e., Australia, Canada, England, New Zealand, and the United States).[3] Forty-seven states and four Canadian provinces now have some level of implementation of Reading Recovery.

Early Identification

Clay (1987b) contends that even in quality school programs, some children will not benefit from sound instruction. Every program has biases that place different demands on children. Given the different response histories of children, the adjustment required for a successful transition to a particular program varies for each child. "Children in a learning programme adjust to the demands of the programme and different programmes bias children's response patterns in different ways" (Clay, 1987b, p. 163). In Reading Recovery, at the beginning of the year teachers are asked to identify the children who are experiencing the greatest difficulty, for whatever reasons, in learning to read and write. Selection includes children who are participating in the regular reading program. Exceptions are not made for any reason including for children of lower intelligence, possible learning disability, or limited English proficiency (Clay & Cazden, 1990).

The Observation Survey (Clay, 1993), which is separate from but used in Reading Recovery, is administered to children whom the teachers indicate are performing at below-average levels in reading and writing. The Survey is a set of six individually administered observation procedures that collectively provide a triangulated assessment of a child's reading and writing performance (Gaffney, 1991b). The six observational procedures are:

1. Letter Identification. A child is asked to identify 54 letters, including upper and lowercase characters plus the alternate forms of *a* and *g*. Children may respond with the name of the letter, the sound of the letter, or a word beginning with the letter.

2. Word Test. A child is invited to read a sample of high-frequency words that have been drawn from the "corpus of words that the child has had the opportunity to learn" (Clay, 1985, p. 31) in the classroom reading program. A word list compiled by the faculty at The Ohio State University is used in the United States (Clay, 1993; Pinnell, DeFord, & Lyons, 1988).

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[2]A written description does not provide sufficient information for effectively implementing Reading Recovery. Participation in the specialized training is necessary to support adequately the implementation of this complex intervention.

[3]The terminology used in this report corresponds to the implementation of Reading Recovery in school systems in the United States. Although there is only one version of Reading Recovery, policy makers in different countries incorporate the program into the framework of their educational systems. For example, in New Zealand most children start school on their fifth birthday rather than as part of a cohort of children starting kindergarten on the same day, as is done in districts in the U.S. Also, a New Zealand Tutor is comparable to a Teacher Leader in the U.S.

3. **Concepts about Print.** While the teacher reads aloud a little book that has been developed specifically for this purpose, a child is asked to indicate particular features of the text. For example, the child is asked to locate the front of the book, where one starts reading, capital letters, and a word. An observer records whether the child notices changes in line, word, and letter order in text and if the child knows the purposes of common punctuation marks.

4. **Writing Vocabulary.** A child is asked to write down all known words in 10 minutes. The teacher may prompt the child by suggesting words from the child's basic vocabulary or categories of words (e.g., names of animals, things to eat).

5. **Hearing and Recording Sounds in Words (Dictation Task).** A child is read a story of one to two sentences and asked to write down the words in the story. The child may be prompted to "say them slowly and think how you would write them" (Clay, 1985, p. 38).

6. **Running Record of Text Reading.** After being told the title of a selection and given a brief orientation to the story, the child is asked to read the text orally while the teacher records the child's reading behaviors. Running records of text reading reflect what a child is saying and doing "on the run" in a task like that expected in the classroom. The running record provides a lens that reveals the operations or processes the child is using while interacting with texts of varying levels of difficulty.

Administering the Observation Survey to more children than can initially be served in Reading Recovery corroborates the teacher's judgment in the identification of the lowest children and reveals patterns across children's responses. The Observation Survey is used to select the children who performed the lowest on these tasks so that they may be served in Reading Recovery. The results reflect the teaching emphases relative to each classroom program as well as the literacy learning of individual children. The Observation Survey also provides a systematic means for teachers to catalog the items that a child knows and to view *how* the child solves problems during reading and writing tasks in order to inform teaching decisions. Finally, the results of the Survey are a way of measuring changes in a child's performance over time.

The combination of teacher judgment with these systematic procedures for observing children's early literacy behaviors reduces error that Fedoruk and Norman (1991) have found may result from first-grade teacher judgment alone. Fedoruk and Norman contend that teachers differ vastly in the prerequisite competencies they require in first-grade classrooms, and that, therefore, the ecological validity of predictive indices must be considered.

This situational variability is expected and accounted for in the process of selecting children for Reading Recovery. Teachers, not specialists, are trained to administer and analyze the results of the Observation Survey and to make selection decisions based on the profile of scores. The first graders who are the lowest achievers in reading and writing are selected for Reading Recovery. Clay (1991b) notes that the lowest scorers in one school might be better than some of the high scorers in another school. The point is that personnel in each school have made the decision to increase the performance of the low progress readers in their school. In addition, the Observation Survey, unlike nationally standardized tests, enables teachers and administrators to examine closely the patterns of performance that children in their systems are developing in response to specific program emphases.

Readiness: A System Responsibility

The term *readiness* is most often used to refer to a young child's preparation for literacy learning upon school entry. In this context, one hears statements such as "Tina is not ready to read," "Carlos needs more time," "Jared is missing some prerequisite skills," and "Wayne is too immature." The assumption underlying this idea of readiness is that there is one path to literacy that is entered through a gate

represented by absolute standards of prerequisite skills or abilities. In this conceptual picture, Teale and Sulzby (1986) point out that children are not reading or writing until they pass through the gate. The implication is that children's readiness for reading varies as a result of different rates of maturation and, therefore, that reading instruction for slow-progress children would be pre-mature. In this passive notion of readiness, development precedes learning (Kagan, 1990).

An alternate view proposed by Clay (1979, 1991a) is that the formal demands of school, in general, and of reading instruction, in particular, present challenges for young children in which they must transform prior ways of responding in order to respond to novel situations. "The need to transform preschool competencies into new ways of responding creates the developmental discontinuity, makes the early reading success a product of learning, and discredits the adequacy of a maturation concept of learning" (Clay, 1991a, p.21). To withhold literacy instruction, waiting for maturation, is to deprive children of the very learning opportunities that they need to progress. Consistent with Vygotsky, Clay and Cazden (1990) state that "instruction leads development rather than waiting for it" (p. 220). Clay suggests that children will vary widely in patterns of progress and lengths of transition periods during their first years at school. If this perspective prevails, "the school's programme must go to wherever each child is and take his learning on from that point" (Clay, 1991a, p. 19). As posited by Kagan (1990), the burden of proof of readiness is transferred "from children to schools, making readiness a condition of the institution, not of the individual. . . . The concern should focus not on whether children are ready for schools, but on whether schools are ready for children" (p. 274).

Purpose of Intervention: Prevention versus Remediation

Reading Recovery is a preventive rather than a remedial intervention that may be implemented by a school system to respond to the children who are experiencing significant difficulties in making the transformations essential for successful transitions to formal schooling and to literacy programs. Early identification enables a school system to implement an appropriate preventive intervention before children fail. Although serious concerns have been expressed about the use and abuse of screening procedures and special interventions at the kindergarten level (Martin, 1988; Shepard, 1991), early identification is critical to effective preventive intervention. Clay (in press) concurs with Martin and with Shepard that "we should not be eager to predict failure before exposure to the opportunity to learn. . . . We should not try to identify which children will fail in reading and writing before they have been given the opportunity to succeed in a good programme" (p. 3). Kagan (1990) argues that school entry is individualized by screening out or "siphoning off" children who are not ready into extra-year classes but, once children enter the system, services are homogenized. Like Clay (in press), Kagan claims that it is the school's responsibility (*response*-ability) to adjust to individual differences.

Without preventive services, lowest achieving children will fall farther and farther behind their peers until it is determined that they have failed and a remedial intervention can be implemented. Remediation, therefore, requires a long-term intervention because the children have practiced inappropriate ways of responding to print for long periods of time. In the U.S., first grade appears to provide a window of time within which teachers may closely observe children's response repertoires, assess the progress of individual children, and intervene before inefficient response patterns are established, leading to failure and the subsequent need for long-term remediation.

Prevention as a System Intervention

Pianta (1990) proposes a preventive schema as a viable means for a school system to use in organizing and implementing delivery of special services that are responsive to individual children. Pianta uses the framework proposed by Caplan (1961) of three forms of prevention: primary, secondary, and tertiary. Pianta differentiates the three forms of prevention as follows:

1. Primary prevention actions are designed either to reduce the rate of occurrence of a particular problem, or to strengthen the well-being of the individuals in the population as a form of inoculation against the causes of subsequent problems. These interventions are made available to the entire population and are targeted specifically toward groups and individuals who have not yet been identified as having the problem to be prevented (pp. 306-307). Inoculation of school-age children for measles, for example, is a primary prevention.

2. Secondary prevention programs provide services to a select group of the population who have the highest likelihood of experiencing the target outcome (a high-risk group), to keep problems from becoming debilitating, and to diminish the effect of early identified dysfunction. These programs are usually offered in the absence of primary prevention or if the individual did not benefit from primary prevention services (p. 307). Drop-out prevention and pre-referral interventions are examples of secondary prevention programs.

3. Tertiary prevention consists of intervention after a negative outcome has been attained, that is, after the child has failed. Tertiary prevention (remediation) seeks to reduce the residual effects or adverse consequences of disorder or failed outcome (Cowen, 1980). Tertiary prevention is the *most* common form of formal intervention services delivered in the public schools (p. 308). Remedial and special education programs are examples of tertiary prevention programs.

Remediation and special education have been the dominant modes for delivery of services to meet the individual needs of children. As tertiary interventions, both systems require that children fail before services may be rendered. Compounding the formidable gap between failing and successful children, the effectiveness of both service delivery systems has been challenged (Allington & McGill-Franzen, 1989; Lipsky & Gartner, 1989; Reynolds, Wang, & Walberg, 1987; Stainback & Stainback, 1984; Ysseldyke et al., 1983). Pianta suggests that preventive services be given consideration as viable additions to remedial programs, thus reserving remedial programs for children with the most severe needs.

Reading Recovery is a way for a system to intervene to prevent reading and writing failure within a school or district. Within Pianta's conceptualization, Reading Recovery is a secondary prevention that provides a second chance for success for first-grade children, who after one year of quality instruction (primary prevention) are at risk of failing to learn to read and write. Children who are unable to attain average levels of reading and writing performance in their classrooms after approximately 20 weeks of participation in Reading Recovery may be referred to specialist services (tertiary prevention), such as remedial and special education programs. Clearly, Reading Recovery widens the scope of prevention that a school or district may offer under the auspices of general education.

Achieving Full Implementation

A goal of full implementation is crucial to the success of a preventive intervention. Full implementation of Reading Recovery means that every first-grade child within an educational system who is at risk of reading and writing failure has the opportunity to participate in a complete, individual program. An educational system may be a district, a consortium of districts, or even a state. For most systems, full implementation is a gradual process that must be planned for and successively achieved in each classroom, in every school, within an educational system that has chosen to participate in Reading Recovery.

A primary consideration for establishing full implementation is the number of children within a first-grade cohort and the proportion of children who may be in jeopardy of not learning to read at a level commensurate with their average classmates. Research has shown that approximately 10-20% of young children fall into this range. The proportion of children who require an intensive intervention

will vary across systems and may be less than 10% or may well exceed 20%. The actual percentage of children who are served in Reading Recovery will depend on the allocation of personnel resources, the quality of training, the effectiveness of the implementation, and the successful communication of the value of early, preventive interventions (Clay, 1987a, 1990b)

The value of full implementation cannot be minimized when policy decisions are being made regarding the implementation of preventive interventions such as Reading Recovery. With partial implementation, children who need services and are unable to receive them have an increased likelihood of failure. Long-term planning must also take into account maintenance of the current level of implementation as well as expansion. Continuing support of trained personnel and expected teacher attrition require a continuous training scheme. Clay (1990b) cautions decision makers to be aware that effective prevention programs destroy the very evidence that led to their creation and the results are taken for granted. The medical field is replete with examples of preventive procedures that, once discontinued, led to the resurgence of a disease that had been eradicated.

Changing Each Child's Trajectory of Progress

Reading Recovery has a two-pronged goal: (a) to assist children who are most at risk of reading and writing failure to perform at average levels commensurate with their peers in the least amount of time and (b) to have these children continue to improve after discontinuing Reading Recovery instruction. These goals are a clear statement of the level of competency needed to discontinue services to children relative to their educational system. In addition, the elusive goal of generalization of learning, which is always sought and seldom achieved, is incorporated into these statements as an expected outcome.

For those who are developing and implementing secondary preventive interventions, the concept of "change over time" is critical. The effects of an intervention, especially for persons who have the probability of experiencing negative outcomes in a significant aspect of their lives, must be profound and swift in order to counteract the likelihood of failure. The standard of competency restricts the period that is available for changing the trend of performance. Logically, programs designed to reduce the percentage of children who drop out of high school have a greater latitude in the period of intervention than a program intended to reduce kindergarten retention. Clearly, the upper limit of 20 weeks recommended by Clay (1990a) for a child's participation in Reading Recovery restricts the interval in which change can be affected. To bring the lowest children to average levels of literacy within this time period requires dramatic change in the "trajectory of each child's progress" (p. 63).

> I assumed that an acceptable trajectory of change over time was that described by the original longitudinal data for children making successful progress. This gave us models of average and high progress, and explicit in our model of change was that we aimed to teach the poor readers to use the strategies observed in successful readers on the assumption that to be competent in literacy low achieving children would need to learn to do what good readers did. This has not been a common assumption in remedial programs. (Clay, 1990a, p. 10)

As a short-term intervention, Reading Recovery teachers attend to both the direction and rate of change in each child's performance. This rapid rate of change is referred to as accelerated progress. Accelerated progress is essential if the lowest achievers are to catch up and perform within the average range of their peers on reading and writing tasks. "Such a goal runs counter to the expectations of many educators but it has been reached by a high proportion of Reading Recovery children" (Clay, 1990b, p. 63).

Research in New Zealand, Australia, and the United States has demonstrated that children are able to perform at levels commensurate with their average peers after an average range of 12-18 weeks of

instruction (Clay, 1985, 1990b; Pinnell et al., 1988; Wheeler, 1986). In addition, these children are able to continue to make progress in reading and writing through their regular classroom program (Clay, 1990b; Pinnell et al., 1988; Slavin & Madden, 1989).

Facilitating Accelerated Progress

Although the systemic nature of the intervention cannot be overemphasized, the overall effectiveness of Reading Recovery is achieved one child at a time. Children are actively engaged in reading texts and writing stories during an intensive, one-to-one tutorial session for 30 minutes daily by a teacher who has been specially trained to design and implement an individual program for each child. The teacher creates the program moment by moment during a lesson through informed interaction with a child.

The specialized training that the teachers receive enables them to reconstruct a framework for observing and responding to children. Through the training, teachers develop new understandings about the relationships between children's reading and writing behaviors and the processes underlining those behaviors. Different behaviors become salient as the teachers deepen their understanding about those behaviors that represent forward thrust on the paths of progress of successful readers. Responses that previously went unnoticed now become indicators of significant change in a child's performance. For example, a teacher acknowledges a child's inclusion of a new word in a story that he is writing even though the response was only partially correct. The teacher values this approximation because of the *process* the child used to construct the response, not because of the accuracy of the response.

Gradually, teachers recognize the value of partially correct responses as indicators of children's emerging control over processes. Partially correct responses give a teacher a way of analyzing a child's current level of performance on a specific task to support the child's new learning. A Reading Recovery teacher works in partnership with a child to encourage reading and writing work at the "cutting edge of the child's competencies" (Clay & Cazden, 1990, p. 219). The teaching needs to be adjusted continually to enable the child to problem solve on more difficult tasks. The more finely calibrated the teaching, the more robust are its effects. The effects of powerful teaching are leaps by the child that are a result of the child's control of nascent skills or processes. Powerful teaching helps the child make leaps by teaching him *how to* perform a new task rather than requiring the cumbersome acquisition of knowledge, item by item. Traditionally, the way that educators have adapted instruction for special education students has been to limit the curriculum. In the five models for limiting curriculum, described by Howell, Kaplan, and O'Connell (1979), the curriculum is viewed as an accumulation of item knowledge. The curriculum is reduced by the elimination of items that are deemed to be unnecessary within each model, thus depriving low-progress children access to information available to other children. In Reading Recovery, acceleration is achieved by fostering the child's control of *processes* through the teacher's "selection of the clearest, easiest, most memorable examples with which to establish a new response, skill, principle, or procedure" (Clay, 1985, p. 53).

> There is an important assumption in this approach. Given a knowledge of some items, and a *strategy* which can be applied to similar items to extract messages, the child then has a general way of approaching new items. We do not need to teach him the total inventory of items. Using the strategies will lead the reader to the assimilation of new items of knowledge. (p. 14)

Creating the Opportunity to Learn From Classroom Teaching

Reading Recovery supplements literacy instruction in the first-grade classroom. An important advantage of simultaneous participation in both instructional contexts is that children have the opportunity to apply new behaviors learned in the tutorial setting to reading and writing tasks in group settings. Through the precise interactions of the Reading Recovery teacher and the child, children gain more independence

in the construction of meaning while reading increasingly difficult texts and in the written construction of their own messages. Consistent with the constructivist view of learning, children are viewed as active, constructive, and generative architects of their own understandings (Wood, 1988, p. 116). Thus, the vehicle for transfer of information across instructional settings is the child.

Transfer will occur only when a child is actively engaged in meaningful tasks at an appropriate level of difficulty. Reading Recovery teaching is discontinued when a child is observed to be benefiting from instruction commensurate with the average of the classroom. The child's reading and writing behaviors in context are then double-checked with the child's performance on the Observation Survey. Evidence that the child is using appropriate strategies is necessary for the discontinuation of Reading Recovery services. These latter criteria establish the ecological or social validity of Reading Recovery.

Observing and Teaching Children

Identifying Children's Strengths

In a previous section, the use of the Observation Survey for selecting children was thoroughly explained. For those children who are selected to receive Reading Recovery services, the Observation Survey affords the teacher a lens for observing each child's use of strategies on letters, words, and text during reading and writing tasks. More important than scores are the opportunities the teacher has for observing the ways that a child interacts with print on a variety of tasks. The strengths that a low-progress child exhibits are particularly noteworthy. They form the basis from which the child's program is initiated. Because each child has a different repertoire of strengths, a different program needs to be developed for each child.

A tool such as the Observation Survey yields information from which to launch a child's program. More information is gained during a two-week period called "Roaming Around the Known." During this period, the teacher has the opportunity to observe a child on a large array of reading and writing tasks that are designed, using the child's strengths, to be easy. The teacher engages children in reading texts and writing stories in such a way that they experience success and increase their willingness to take risks. Gradually, the teacher addresses the needs of the child and introduces more challenging tasks into Reading Recovery lessons.

In a typical Reading Recovery lesson, the child rereads several familiar books; independently reads a book read for the first time the previous day; if necessary, works with letters or words; creates and writes a story; reassembles the story after the teacher has cut it up; and reads a new book following an orientation by the teacher. These components form the skeletal framework of a lesson; within this framework, however, the teacher creates an individual program for each child utilizing the specialized Reading Recovery procedures. The teacher's skillful use of these procedures promotes a child's accelerated progress. Just as a bowl being shaped on a potter's wheel must be centered each time, so must teaching be recalibrated with each response of the child. The child's reading and writing behaviors provide "teachers with feedback which can shape their next teaching moves. Teaching then can be likened to a conversation in which you listen to the speaker carefully before you reply" (Clay, 1985, p. 6).

Education of Reading Recovery Teachers

A key to successful implementation of Reading Recovery is a staffing scheme in which *Trainers of Teacher Leaders*, who are specially trained university faculty members, conduct training for *Teacher Leaders*, who in turn conduct training for *Teachers* (Gaffney, 1991a). This staffing scheme assures that the replications of Reading Recovery will be consistent across districts and across generations of training. The evidence of quality control is the consistent success--as measured by children's progress--

of the program across educational settings. This description will be limited to the training of teachers. For further information regarding the training of other Reading Recovery personnel, see Clay (1987a,1991b) and Jongsma (1990).

The success of Reading Recovery is contingent upon a teacher's skill in designing and implementing a "superbly sequenced programme determined by the child's performance, and to make highly skilled decisions moment by moment during the lesson" (Clay, 1985, p. 53). Experienced teachers of young children volunteer to participate in an intensive, year-long training course that includes: (a) assessment training in the use of the Observation Survey prior to the beginning of school, (b) a weekly inservice session, (c) daily teaching of a minimum of four children, and (d) school visits by a Teacher Leader.

Each week, as part of the inservice session, two teachers conduct a 30-minute lesson with a child whom they are currently teaching. The other participants observe the lessons through a one-way mirror. The Teacher Leader engages the participant-observers in a discussion of each lesson as it occurs. According to Gaffney and Anderson (1991), the teachers

> discuss the child's behavior, teacher-child interactions, and the teacher's implementation of procedures. They are challenged to form hypotheses about the child's performance, to present evidence from the lesson unfolding in front of them that supports or disconfirms their hypotheses, to provide rationales for the teacher's decisions, and to suggest alternative instructional procedures. (p. 191)

Following the two lessons, the Teacher Leader engages the group in a discussion of important aspects of the lessons. The teachers, who have just completed the lessons and who have the most intimate knowledge of the children's response histories, are now available to participate in the discussion. During the "on-line" discussions, behind the one-way mirror and with the group immediately following the lessons, teachers engage in the process of problem solving about the individual needs of children. The discussions about their teaching decisions are grounded in their developing knowledge of the successful performance of good readers and writers. "The teacher-child interactions form the essential content of teacher training." Without the concurrent teaching of children, there would be no thread to weave into the fabric of inservice sessions (Gaffney & Anderson, 1991).

Convergence of Reading Recovery and Special Education

A goal of the Regular Education/Special Education Initiative (REI) is that school services be provided by one system rather than our current dual system of special and regular education. In a dual system, the two service options are general education and remedial or special education. A child must fail in the context of the regular classroom to be eligible for specialized, remedial services. The rationale for this dual delivery system is that in large-group instruction teachers are unable to respond to children who are functioning at the extreme ends of the normal curve; therefore, special services must be provided to respond to the individual needs of these children. Traditionally, the responsibility for the children is determined by the system currently delivering the services. Failing children, therefore, are not perceived as being the responsibility of general education.

The intent of the REI is to respond to the variability among children by offering a continuum of services within one educational system. In this scheme, educators are able to respond flexibly to the individual strengths and needs of children. In contrast to the dual system, which is limited to general education and remedial/special education alternatives, the REI would add preventive interventions to the range of service options provided by the educational system. Rather than shifting responsibility for low-functioning children from general education to remedial or special education, accountability for the progress of all children is the charge of one domain--*the* educational system.

Reading Recovery is an option for preventive intervention by an educational system. When special education is defined as the use of exceptional instruction rather than the instruction of exceptional people (Howell, 1983), Reading Recovery falls under the rubric of special education in the form of a secondary, preventive intervention. Some of the ways that Reading Recovery instantiates the preventive function of special education are represented by the following concepts:

1. Reading Recovery may operate as a prereferral intervention. Children who do not make accelerated progress through the short-term, intensive, and individual Reading Recovery service are legitimate candidates for referral to special education. Thus, Reading Recovery serves a preventive function prior to placement in remedial or tertiary interventions.

2. Reading Recovery is taught by teachers who are trained to use these specialized procedures. Teachers who have experience in primary classrooms where they have had the opportunity to observe a range of children and know the course of average progress participate in the inservice training. Reading Recovery teachers spend half of the day teaching Reading Recovery children and the other half of the day in kindergarten and first-grade classrooms or other group-instruction settings.

3. In Reading Recovery, the focus is on children's observable behaviors on reading and writing tasks, rather than on special education labels. Behaviors are viewed as signals that reflect the child's inner control of reading and writing processes (Clay, 1991a).

4. The instructional emphasis is on alterable variables. The teacher is not concerned with conditions that cannot be modified. The effectiveness of instruction is measured by the progress of children, that is, by changes in a child's behavior over time.

5. Teachers closely observe the reading and writing behaviors of children moment by moment to inform their next teaching decision. In Reading Recovery, observation and teaching are inextricably linked, occurring as nearly simultaneous events in contrast to an assessment-instruction sequence.

6. The goal of instruction is successful and independent reading and writing performance in the first-grade classroom. Reading Recovery children typically achieve this goal within 12-18 weeks. In addition, the expectation is that children, through the flexible use of strategies, continue to improve as they encounter new and more difficult tasks.

Implications for Reorganization of Schools and Teacher Education

Full implementation of Reading Recovery in a system has implications for personnel, programs, and curricula. Roles and responsibilities of the teaching personnel are redefined as a result of implementing a range of services within a unitary system. First-grade teachers who are trained in Reading Recovery deliver specially designed instruction, a role formerly reserved for special educators. Some effects of the operation of Reading Recovery in a district are: (a) the redirection of Chapter 1 resources, (b) the reduction of referrals to special education, (c) a reduced rate of retention in kindergarten and in first grade, and (d) the elimination of transition rooms between kindergarten and first grade. Curriculum changes in the primary grades include a reconceptualization of readiness, increased sophistication of teachers' knowledge of text, and greater emphases on children's writing, and on the reciprocity between reading and writing at the time of acquisition of these literacy skills.

Teacher education is frequently criticized for the discontinuity between the university coursework and field experiences (Joyce & Clift, 1984). The inservice component of Reading Recovery bridges this gap between theory and practice. A two-tiered scaffolding model was developed by Gaffney and Anderson

(1991) to explain the interactive relationship between the teaching and learning of teachers and of the children whom they teach. This model depicts the complex interactions that occur on the first tier (teacher-child) with the interactions that occur on the second tier (teacher educator-teacher). In Reading Recovery, the child is the driving force for activities on both tiers. The effectiveness of the teaching is contingent upon the effectiveness of the teacher training. Rarely has teacher education been able to demonstrate such direct accountability for the impact of teacher training on the performance of children as in Reading Recovery. Programs that are initiated for the purpose of training teachers or for teaching children must be evaluated by the effectiveness of their implementation on both tiers. Ultimately, the value of any intervention rests on its effectiveness with children.

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